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JANUARY 25, 1936

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PUBLISHED MONTHLY BY

THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY

THIRTY-SIXTH STREET AND WOODLAND AVENUE, PHILADELPHIA, PA.

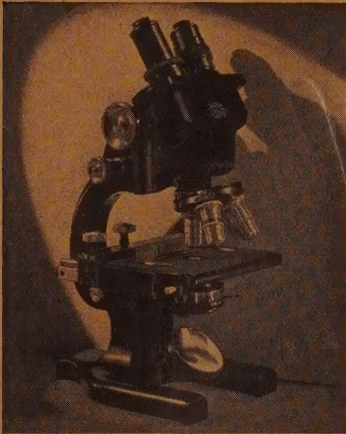
Entered as second-class matter December 9, 1909, at the post office at Philadelphia, Pa., under Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized on July 2, 1918

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SUPPLEMENT

AMERICAN SOCIETY OF ZOÖLOGISTS

Officers for 1936

<i>President</i>	W. C. ALLEE
<i>Vice-President</i>	C. W. METZ
<i>Secretary</i>	H. B. GOODRICH
<i>Treasurer</i>	WALTER N. HESS

Executive Committee

(In addition to the four officers)

FERNANDUS PAYNE.....	to serve until December, 1936
W. C. CURTIS.....	to serve until December, 1937
CHARLES ZELENY.....	to serve until December, 1938
A. H. STURTEVANT.....	to serve until December, 1939
ROBERT W. HEGNER.....	to serve until December, 1940

Representative of the Society in the Division of Biology and Agriculture of the National Research Council

To serve until July 1, 1938.....	L. V. HEILBRUNN
	C. R. MOORE, Alternate

Representatives of the Society on the Council of the American Association for the Advancement of Science

J. E. ACKERT

H. H. PLOUGH

Representatives of the Society on the Council of the Union of American Biological Societies

J. T. PATTERSON

OSCAR RIDDLE

Representatives of the Society on the Advisory Editorial Board of "Biological Abstracts"

H. S. PRATT AND G. K. NOBLE.....	Taxonomy
D. H. TENNENT.....	General Embryology
M. H. JACOBS.....	General Physiology

Representative on the Executive Committee of the Commission for the Standardization of Biological Stains

S. I. KORNHAUSER

Managing Editor of the Journal of Morphology

To serve until December, 1936.....	C. E. MCCLUNG
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Members of Editorial Board of the Journal of Morphology

To serve until December, 1936

CHARLES ZELENY J. F. DANIEL J. S. NICHOLAS

To serve until December, 1937

D. H. TENNENT L. C. DUNN C. G. HARTMAN

To serve until December, 1938

SALLY HUGHES-SCHRADER E. E. JUST D. H. WENRICH

PROCEEDINGS OF THE THIRTY-THIRD ANNUAL MEETING OF THE AMERICAN SOCIETY OF ZOÖLOGISTS

PRINCETON, N. J., DECEMBER 30-31, 1935 AND JANUARY 1, 1936

PROGRAM

The Society met in association with a regional meeting of the Genetics Society of America. The sessions of the Society were held in Guyot Hall and in Eno Hall of Princeton University. In addition to the 211 papers listed in the December supplement of this journal the following abstract read by title was added by vote of the Society.

THE OCCURRENCE OF OESTRUS (SEXUAL RECEPTIVITY) IN THE GUINEA PIG FOLLOWING INTRAVENOUS INJECTION OF LUTEINIZING HORMONE. Edward W. Dempsey, Roy Hertz and William C. Young, Brown University.

In the normal female the beginning of oestrus coincides with the beginning of the pre-ovulatory swelling (Myers, Young and Dempsey, abstract no. 53). Also, oestrus has not been found to occur without ovulation. In view of these facts and the demonstrated role of the luteinizing hormone in ovulation, it seemed possible that this hormone is involved in oestrus.

In our first experiments eight out of twelve animals injected intravenously with 0.2 gm. eq. of sheep luteinizing hormone on the twelfth to fourteenth day of a 16-day cycle came into heat about 5 hours after the injection and remained in heat 1 to 9 hours. Laparotomies 24 hours later showed that pre-ovulatory swelling and either ovulation or luteinization had occurred.

Four animals similarly injected on the fourth day, and four on the eighth day of the cycle failed to come into heat and showed no follicular swelling, indicating that the follicles must be nearly mature before oestrus can be produced.

We are now investigating whether oestrus is due to a direct action of the luteinizer after the animals have been suitably conditioned or to the more rapid production of theelin after stimulation of the follicle by luteinizer. At this time it can only be said that intravenous injection of as many as 200 R.U. of aqueous theelin on the twelfth day has not brought any one of four animals into heat, although the normal oestrus occurred 4 days later.

Five papers scheduled to be presented were reported omitted. The total number of papers listed to be read was 103, presented by demonstration 23, and read by title 85.

The biologists' smoker was held Monday evening in Procter Hall of the Graduate College with an attendance of probably about 300. The annual dinner was also held in Procter Hall, on Tuesday evening, with 200 attending. Dean L. P. Eisenhart welcomed the Society to Princeton University. The annual address was given by Dr. Robert W. Hegner, president of the Society, on 'Multum e Parvo.' Prof. Albert Einstein of Princeton University and Dr. Carl Ten Broeck of the Rockefeller Institute were guests of the Society. The registration at the meetings was as follows:

Number registering both as zoölogists and as geneticists	24
Number registering as zoölogists only	111
Number registering as geneticists only	33
Guests (no indication of membership in either society)	166
Total number who registered	334

BUSINESS MEETING

The thirty-third annual business meeting, with President Hegner presiding, was held at 12.00 M. Tuesday.

The following business was transacted:

1. The minutes of the last meeting previously circulated to members in the January 1935 supplement to The Anatomical Record were declared approved.

2. By vote of the Society the secretary was authorized to publish late abstracts in the January 1936 supplement to The Anatomical Record.

3. *Report of the secretary.* The secretary reported that in case the Society elected members as recommended by the executive committee the membership lists would show the following changes:

Deaths	2	Reinstated	8
Dropped	17	New active members	24
	—	New associate members	47
	19		—
			79
Total gain in enrollment	60		
Total enrollment last report	658		
Total enrollment this report	718		
Associate members advanced to active	24		

4. George Edwin Johnson and Francis Metcalf Root died during the past year and the following resolutions were adopted by the Society:

GEORGE EDWIN JOHNSON

The death of George Edwin Johnson occurred March 18, 1935, at the age of 45 years. Doctor Johnson was quiet, gentle, considerate, yet effectively aggressive. He was most sagacious and a keen judge of the abilities of people and especially of prospective graduate students and assistants. He had carried on fruitful researches in the physiology of hibernation and some features of endocrinology. A considerable number of young men had begun and made measurable progress in researches with him. Besides several of his own, he had published a number of papers in collaboration with these students. He was a thorough and well-poised teacher and his influence will undoubtedly go a long way in American science, especially through his several students of high promise who are going ahead in zoological research and teaching.

Doctor Johnson was a graduate of Dakota Wesleyan, 1913; M.S., The University of Chicago, 1916; Ph.D., Harvard, 1923; Professor of Biology, University of Porto Rico, 1918-21; Austin Teaching Fellow, Harvard, 1921-23; Professor of Zoology, University of Mississippi, 1923-24; Associate and Professor of Zoology, Kansas State College, 1924 till his death. He had been the very efficient and much appreciated secretary of the Kansas Academy of Science for 6 years.

ROBERT K. NABOURS.

FRANCIS METCALF ROOT

Francis Metcalf Root was born on September 29, 1889 at Oberlin, Ohio. He attended Oberlin College from which he received the A.B. degree in 1911 and the A.M. degree in 1912. From Oberlin he went for graduate work to the Johns Hopkins University, where he took up the study of genetics in protozoa in the zoology department under the direction of Prof. H. S. Jennings. He was granted the Ph.D. degree from Johns Hopkins in 1917. During the war he served as captain and commandant in the S.A.T.C. at Oberlin. Then in the spring of 1919 he was called back to Johns Hopkins to organize the work in medical entomology in the newly established School of Hygiene and Public Health, where he served up to the time of his death. Beginning with 1932 Doctor Root served as managing editor of the American Journal of Hygiene. He was also a member of the editorial committee of the Journal of Parasitology and associate editor for animal parasitology for Biological Abstracts.

Doctor Root became interested early in insects and birds and began to publish observations on these groups by 1912. The dragon flies had a special appeal to him and he made collections and studied these forms throughout his whole career. His main research interest, however, was in the taxonomy of the mosquitoes of the Western Hemisphere and his extensive work in this field had made him a world authority. His published work is characterized both by careful attention to detail and breadth of view. He had a wide experience in the American tropics, having carried on investigations in Central America, the West Indies, Venezuela, and Brazil.

Doctor Root was a fine teacher both in the direction of graduate students and in the regular class work. His lectures were models of clearness and accuracy. He was very successful also with his editorial work and always insisted on the highest standards. In fact everything he did whether in research, teaching, or in editorial work bore the stamp of a superior mind.

Although somewhat quiet and reserved, Doctor Root's keen sense of humor, his wide reading and broad experience made him one of the most interesting of companions. He was liked and admired by his students and associates and will be keenly missed by his many personal and scientific friends. His accomplishments were already great in his chosen field and his untimely death at such an early age is a great loss to the field of medical entomology in which he was one of the outstanding American workers.

W. W. CORT.

5. *Report of the treasurer.* The following report of the treasurer was read and approved:

Credits:

Balance on hand December 27, 1934, when the accounts were last audited	\$1239.45	
Interest on savings	11.94	
Receipts from dues, 1935	2215.53	
Check tax 1934	.02	\$3466.94

Expenditures:

Secretary's expenses:

Annual meeting January 22, 1935	\$ 41.97	
Printing and stationery	58.80	
Stenographer	119.62	
Expenses at Princeton and Bryn Mawr, postage, etc.	37.62	\$ 258.01

Treasurer's expenses:

Postage	\$ 29.85	
Stenographer	62.45	\$ 92.30

Wistar Institute:

Proceedings and List of Members ...	\$137.18	
Constitution, By-Laws and Abstracts	418.63	\$ 555.81

Biological Abstracts	1587.00	
Two checks returned	8.00	\$2150.81
		\$2501.12
		\$ 965.82

Balance on hand December 18, 1935, deposited in the name of the American Society of Zoölogists as follows:

Lincoln-Alliance Bank & Trust Co. (checking account)	\$ 453.88
Security Trust Company (saving account)	511.94

	\$ 965.82
Decrease in funds since December 1934	\$ 273.63

6. *Report of the auditing committee.* The following report of the auditing committee was read and approved:

December 30, 1935.

We, the auditing committee, have examined the accounts of the Society and find them clearly kept and accurate.

H. E. JORDAN

CARL G. HARTMAN

7. *Report of representative on Commission for Standardization of Biological Stains.* The following report was read, approved, and the committee continued:

I wish to report that, as representative of the American Society of Zoölogists on the Commission for the Standardization of Biological Stains, I have carried on the routine tests of samples submitted to me by the chairman and have also retested American haematin which was reported as acting unsatisfactorily. I have also interested an American manufacturer in making various azo carmines. So far, we have tested American azo carmine G against an imported sample and found it perfectly satisfactory.

S. I. KORNHAUSER.

8. *The committee on Educational Tests.* The committee has been in session and will report at a later meeting of the Society.

9. *Report of the executive committee.* The report of the executive committee (exclusive of report on membership) was accepted. The committee recommended the following actions:

a. That the next annual meeting be held in Washington with the A.A.A.S. if satisfactory arrangements can be made and that the following annual meeting be held at some point west of the Alleghenies.

b. That of the annual four dollars dues, two dollars be applied to the Biological Abstracts and two dollars to the expenses of the Society.

c. That if the financial position of the Society warrants the expenditure an honorarium of \$200 in addition to expenses be paid to future secretaries (to take effect with Secretary taking office in December 1936).

d. That a payment not exceeding \$100 be paid to the Department of Biology of Princeton University toward defraying expenses of the meeting.

e. That no member should submit by introduction or otherwise more than three papers to be presented by title at any annual meeting.

f. That the present special section meetings known as discussion sections be continued if it seems advisable as invitation programs.

The committee reported that seventeen members were dropped for non-payment of dues for the past 2 years.

The committee reported the confirmation of the appointment of Dr. Caswell Grave and Dr. E. V. Cowdry to serve as

representatives of the Society at the meeting of the Council of the Union of American Biological Societies held in St. Louis on Sunday, December 29, 1935.

In the discussion following the report Dr. C. E. McClung and Dr. E. G. Conklin outlined the present status and prospects of the Biological Abstracts.

It was moved and passed that the executive committee be requested to arrange for the place and time of the next annual meeting and that it was the sense of the meeting that separate meetings are frequently desirable.

The financial recommendations of the committee were approved.

10. *The election of members.* Upon recommendation of the executive committee and by motion duly made and carried the following members were elected by the secretary casting one ballot in their favor:

ACTIVE MEMBERS

(Formerly Associate Members)

Alexander, E. G.	Johnson, H. H.	Sawin, P. B.
Anderson, B. G.	Kendall, J. I.	Scott, J. A.
Clark, L. B.	Luce, W. M.	Slifer, E. H.
Coatney, G. R.	Luyet, B. J.	Steinbach, H. B.
Costello, Donald P.	Lynn, W. G.	Taylor, I. R.
Herrick, E. H.	Pace, D. M.	Weimer, B. R.
Ingles, L. G.	Prosser, C. L.	Wilson, J. W.
Jeffers, K. R.	Sampson, Myra M.	Wright, Stillman

ACTIVE MEMBERS

(Not formerly Associate Members)

Armstrong, Philip B.	Lindsey, Arthur Ward
Blount, Raymond Frank	Melander, A. L.
Chesley, L. C.	Nelsen, Olin Everett
Demerec, Milislav	Pollister, Arthur Wagg
Enders, Robert Kendall	Romer, Alfred Sherwood
Friend, Roger Boynton	Shapiro, Herbert
Gaunt, Robert	Sonneborn, Tracy Morton
Hamlett, George Whitfield Deluz	Steggerda, Frederic Russell
Helwig, Edwin Royer	Stern, Curt
Hitchcock, Fred Andrews	Swett, Francis Huntington
Irving, Laurence	Weill, Robert F.
Leonard, Samuel Leeson	Whitaker, Douglas Meritt

ASSOCIATE MEMBERS

Barrett, William Clark, Jr.	Kopac, Milan James
Bennington, Neville Lynne	Korr, Irvin Morris
Branch, Hazel Elisabeth	Loefer, John B.
Browman, Ludvig Gustav	Margolis, Otto S.
Brown, Frank Arthur, Jr.	Markus, Henry C.
Buchsbaum, Ralph	McKinley, George Murray
Butler, Elizabeth	Miller, E. DeWitt
Buyse, Adrian	Miller, John Allen
Cable, Raymond M.	Myers, Hugh Irvin
Chesley, Paul	Olipphant, Joseph Frederick
Clarke, L. Floyd	Roeder, Kenneth Davis
Crescitelli, Frederick	Rosene, Hilda Florence
Crowell, Prince Sears	Schechter, Victor
Dennis, Earl Aubrey	Sichel, Ferdinand J. M.
Dildiue, Glenn Crawford	Stanley, Willard Francis
Driver, Ernest Charles	Stultz, Walter Alva
Dunihue, Fred Williams	Summers, Francis Marion
Eigenbrodt, Harold John	Walzl, Edward McColgan
Elliott, Alfred	Wantland, Wayne W.
Fish, Harold Somers	Warren, Arthur Emerson
Frisch, John Augustine	Wells, Nelson A.
Gordon, Albert Saul	Winsor, Charles P.
Hall, Benjamin Vincent	Yeatter, Ralph Emerson
Hertz, Roy	

11. *Report of nominating committee and election of officers.*
The committee (F. E. Lutz, W. C. Curtis and L. V. Heilbrunn) recommended the following slate of officers and representatives:

President, 1 year, W. C. ALLEE.

Vice-President, 1 year, C. W. METZ.

Treasurer, 3 years, WALTER N. HESS.

Member of executive committee, 5 years, ROBERT W. HEGNER.

Representatives on A.A.A.S. council, 1 year, J. E. ACKERT, H. H. PLOUGH.

Representatives on Council of Union of American Biological Societies, 1 year, J. T. PATTERSON, OSCAR RIDDLE.

Members of editorial board of Journal of Morphology, 3 years, SALLY HUGHES-SCHRADER, E. E. JUST, D. H. WENRICH.

There being no further nominations the secretary was instructed to cast one ballot for the nominees as presented and they were declared elected.

12. Miscellaneous business. Dr. Fernandus Payne expressed the appreciation of the Society to Princeton University and especially to the Department of Biology for the arrangements and hospitality which had rendered the meeting so successful. A motion was made and passed formally expressing the thanks of the Society to Princeton University and to the members of the Department of Biology.

Meeting adjourned.

H. B. GOODRICH,
Secretary.

CONSTITUTION AND BY-LAWS

No change was made in the constitution and by-laws. They have therefore not been reprinted and will be found in the supplement to *The Anatomical Record* for December 25, 1935, vol. 64, no. 1.

NOMINATING COMMITTEE

The nominating committee appointed by President Hegner to present nominations for consideration in December, 1936, is as follows: Ulric Dahlgren, chairman, H. V. Neal, Mary J. Hogue.

LIFE AND ACTIVE MEMBERS

(Life members indicated by an asterisk)

(Mailing address is indicated by italics)

- ACKERT, JAMES EDWARD, A.B., A.M., Ph.D. (Illinois), Professor of Zoölogy, Parasitologist Agr. Exp. Station; *Kansas State College, Manhattan, Kan.*
- ADAMS, AMY ELIZABETH, B.A. (Mt. Holyoke), M.A. (Columbia), Ph.D. (Yale), Professor of Zoölogy, *Mount Holyoke College, South Hadley, Mass.*
- ADAMS, LEVERETT ALLEN, A.B., A.M. (Kansas), Ph.D. (Columbia), Assistant Professor of Zoölogy, University of Illinois, *406 Nevada St., Urbana, Illinois.*
- ADAMSTONE, FRANK BOLTON, B.A., M.A., Ph.D. (Toronto), Associate in Zoölogy, *University of Illinois, Urbana, Ill.*
- ADELMANN, HOWARD BERNHARDT, A.B., A.M., Ph.D. (Cornell), Assistant Professor in Histology and Embryology, *Stimson Hall, Cornell University, Ithaca, N. Y.*
- ADOLPH, EDWARD FREDERICK, A.B., Ph.D. (Harvard), Associate Professor of Physiology, School of Medicine, *University of Rochester, Rochester, N. Y.*
- AGERSBORG, H(ELMER) P(ARELI VON WOLD) K(JERSCHOW), B.S., M.S. (Washington), M.A. (Columbia), Ph.D. (Illinois), Senior Wild Life Technician, *National Park Service, Washington, D. C.*
- ALEXANDER, (EDWARD) GORDON, A.B. (Central), A.M., Ph.D. (Princeton), Associate Professor of Biology, *University of Colorado, Boulder, Colo.*
- ALLEE, WARDER CLYDE, S.B. (Earlham), S.M., Ph.D. (Chicago), Professor of Zoölogy, *University of Chicago, Chicago, Ill.*
- ALLEN, BENNET, Ph.B. (De Pauw), Ph.D. (Chicago), Professor of Zoölogy, University of California at Los Angeles, *909 Micheltorena St., Los Angeles, Calif.*
- ALLEN, EDGAR, A.M., Ph.D. (Brown), Professor of Anatomy, Yale University, *333 Cedar St., New Haven, Conn.*
- ALLEN, EZRA, A.B., A.M. (Bucknell), Ph.D. (Pennsylvania), Associate Professor of Histology and Embryology, *New York Homeopathic Medical College and Flower Hospital, York Ave. and 64th St., New York, N. Y.*
- ALLEN, WILLIAM RAY, A.B., A.M., Ph.D. (Indiana), Professor of Zoölogy, University of Kentucky, *417 Clifton Ave., Lexington, Ky.*
- ALTENBURG, EDGAR, A.M., Ph.D. (Columbia), Assistant Professor of Biology, *Rice Institute, Houston, Texas.*
- ANDERSON, BERTIL G., A.B. (Augustana), M.S., Ph.D. (Iowa State), Instructor in Biology, *Biological Laboratory, Western Reserve University, Cleveland, Ohio.*
- *ANDREWS, ETHAN ALLEN, Ph.B. (Yale), Ph.D. (Johns Hopkins), Professor of Zoölogy, *Johns Hopkins University, Baltimore Md.*
- ANGULO Y GONZALEZ, ARMANDO W., A.B., A.M., Ph.D. (Kansas), B.S., B.L. (Inst. Prov. de Oriente, Santiago de Cuba), Associate Member of The Wistar Institute, *36th Street and Woodland Avenue, Philadelphia, Pa.*
- APEY, LESLIE BRAINDERD, Ph.D. (Harvard), Robert L. Rea Professor of Anatomy and Chairman of the Division of Anatomy, *Northwestern University Medical School, 303 E. Chicago Ave., Chicago, Ill.*

- ARMSTRONG, PHILIP B., B.S. (Mass. State), M.D. (Cornell), Assistant Professor of Anatomy, *Department of Anatomy, Cornell University Medical College, 1300 York Ave., New York, N. Y.*
- ATWELL, WAYNE JASON, A.B. (Nebraska Wesleyan), A.M., Ph.D. (Michigan), M.D., (Buffalo), Professor of Anatomy, University of Buffalo, *24 High St., Buffalo, N. Y.*
- BAITSELL, GEORGE ALFRED, B.S. (Central College, Iowa), M.A., Ph.D. (Yale), Professor of Biology, Yale University, *Osborn Zoölogical Laboratory, Yale Station, New Haven, Conn.*
- BAKER, HORACE BURRENTOON, B.S., Ph.D. (Michigan), Associate Professor of Zoölogy, University of Pennsylvania, *Zoölogical Laboratory, University of Pennsylvania, Philadelphia, Pa.*
- BALDWIN, S. PRENTISS, A.B., A.M., D.Sc. (Dartmouth), LL.B. (Western Reserve), Director, Baldwin Bird Research Laboratory, Research Associate in Biology, Western Reserve University, *11025 E. Boulevard, Cleveland, Ohio.*
- BALL, GORDON HAROLD, B.S., M.S. (Pittsburgh), Ph.D. (California), Assistant Professor of Zoölogy, *University of California, Los Angeles, Calif.*
- BALL, STANLEY CRITTENDEN, Ph.B., Ph.D. (Yale), Assistant Professor of Biology and Curator of the Zoölogical Collection, *Peabody Museum, Yale University, New Haven, Conn.*
- BANGHAM, RALPH VANDERVORT, A.B. (Wilmington), B.S., A.M. (Haverford), Ph.D. (Ohio State), Professor of Biology and Head of Department, *Wooster College, Wooster, Ohio.*
- BANTA, ARTHUR MANGUN, A.B., A.M. (Indiana), Ph.D., (Harvard), Research Professor of Biology, Brown University, *Biology Department, Brown University, Providence, R.I.*
- BARBOUR, THOMAS, A.B., A.M., Ph.D. (Harvard), Director, *Museum of Comparative Zoölogy, Cambridge, Mass.*
- BARKER, FRANKLIN D., A.B., A.M. (Ottawa), Ph.D. (Nebraska), Professor of Zoölogy, *Northwestern University, Evanston, Ill.*
- BARNES, THOMAS CUNLIFFE, B.A. (Cornell), D.Sc. (Harvard), Instructor in Biology, *Osborn Zoölogical Laboratory, Yale University, New Haven, Conn.*
- BARROWS, WILLIAM MORTON, B.S. (Michigan Agricultural College), S.B., S.M., S.D. (Harvard), Department of Zoölogy and Entomology, *Ohio State University, Columbus, Ohio.*
- BARTELMEZ, GEORGE WILLIAM, Ph.D. (Chicago), Associate Professor of Anatomy, *University of Chicago, Chicago, Ill.*
- BARTH, LESTER G., A.B. (College of the City of Detroit), A.M. (Michigan), Ph.D. (Chicago), Instructor in Embryology, *Department of Zoölogy, Columbia University, New York, N. Y.*
- BARTSCH, PAUL, B.S. (Iowa), M.S., Ph.D., Curator, Division of Mollusks, U. S. National Museum, *Smithsonian Institution, Washington, D. C.*
- BAUMGARTNER, WILLIAM JACOB, A.B., A.M. (Kansas), Ph.D. (Munich), Professor of Zoölogy, University of Kansas, *1209 Ohio St., Lawrence Kans.*
- BEAMS, HAROLD WILLIAM, A.B. (Fairmount), M.A. (Northwestern), Ph.D. (Wisconsin), Assistant Professor, *Zoölogy Department, State University of Iowa, Iowa City, Iowa.*

- BEAN, ELIZABETH SMITH, A.B. (Cincinnati), M.A., Ph.D. (Wisconsin), Instructor in Histology and Embryology, *Dalhousie University, Halifax, N. S.* Summer address, *112 S. Governor St., Iowa City, Iowa.*
- BECCARI, NELLO, M.D. (Florence), Professor of Comparative Anatomy, *Istituto di Anatomica Comparata, Via Romana, 19, Florence, Italy.*
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TOTALS

Life members,	5
Active members,	549
Associate members,	164
Grand total,	718